

APPENDIX J

Research Functions and Resources

RESEARCH FUNCTIONS AND RESOURCES

This document on research functions, and the pros and cons of different research methodologies was developed by researchers at the Administrative Office of the Courts, Center for Families, Children and the Courts (CFCC). The list of project types is not exhaustive, but an attempt to define common types of research projects. The research projects discussed range from some that are relatively low-cost and general in nature to some that are extremely costly and provide information highly specific to certain programs and populations. Each project type also has advantages and disadvantages.

The project proposals in the next sections of this document use these project types to provide readers with a better understanding of (a) the types of questions the proposed project would address, (b) the pros and cons, and (c) the resources that would be required to conduct it.

Table 1 lists these project types, approximately in order, from least to most labor- and/or resource-intensive. It also provides detailed information about each project type, as a reference. Two notes when reviewing the information in the table:

- Project type categories are not necessarily mutually exclusive. For example, a policy study might include a qualitative study, a population survey, or a management survey.
- Different project types address different kinds of questions and provide different types of information. Therefore, multiple project types are often conducted together. For example, a full program evaluation often includes both a process evaluation and an impact evaluation component.
- All proposed projects should incorporate elements that would examine issues critical to California court operations, such as race and ethnicity, rural and urban issues, gender, large and small county/court issues.

The range of research projects suggested include the following (full descriptions can be found in Table 1):

- **Annotated bibliographies, literature reviews, and meta-analyses.** Review and synthesis of existing research literature. Require relatively few resources and are an important way of examining evidence and promoting best practices and the development of evidence-based programs. However, findings can be inconclusive if relatively little research or comparable research exists or if findings in the literature are contradictory.

- **Analysis of extant data:** Analysis of existing and/or publicly available datasets that contain information on a population or a program. Does not require original data collection, which is very resource-intensive. However, appropriate data sources or data elements often do not exist or they may be difficult to access or link together.
- **Policy study:** Analyzes the effects of existing or proposed legislation, rules, or standards. Usually incorporates elements of other study types. Often conducted quickly, and information necessary for the analysis may not exist.
- **Qualitative study:** Uses qualitative methods, such as case studies, observation, focus groups, or interviews. Often useful to conduct when population studied will be hard to contact and can provide explanations for results found during quantitative analyses. Generally involves the study of small samples, so findings can only be considered preliminary and may not be representative of the entire population.
- **Program process evaluation:** Qualitative study that describes program implementation and operation. Provides important details about specific operations of a program, services provided, caseload, number of cases served, and/or successes or barriers. Important to conduct when program will be replicated. Does not address questions about the effects or cost impact of a program.
- **Data systems or technology projects:** Technical assistance or consultation in setting up a computerized or electronic data collection system for a program, court division, or other service. Can help promote the collection of common data elements that will make possible the comparison of data from different programs. Usually requires involvement of many stakeholders and can be prohibitively expensive to implement.
- **Evaluative toolkits:** Development of standardized methods for program evaluation, assessment and classification, or data collection. Helps promote collection of common data elements, provides programs with resources for self-study. Can be difficult to develop methodology or data elements that are appropriate to multiple program types, may require extensive technical assistance for a program to implement.
- **Management surveys:** Surveys directed at the administrators or staff of programs. Provides information about types of services offered and/or estimates of size of population served. Relies on program staff estimates and does not provide information about the actual operations of a service or the flow of cases through a program.
- **Survey or data collection on a population:** Survey or data collection on a population – either of a sample or the entire population. Provides important information for programs about the population they serve and whether they are meeting the needs of that population. Requires pilot-testing, and can be difficult and expensive to design and conduct. Surveying the entire population (census) can be prohibitively expensive and is likely to result in substantial amount of missing data.
- **Program impact evaluation:** Quantitative analysis of the impact of a program on a population, system, or service. Provides important information about program impact. Often expensive and time-consuming to conduct appropriately.

Table 1. Types of Research Projects

Type of Project	Description	Questions Addressed	Advantages	Limitations	Resources or Expertise Required
Annotated Bibliography	Review of existing literature on a topic. Contains a brief description and critical examination of each study.	What does existing research tell us about a population, program, or other area?	Inexpensive Provides extensive background material. Multiple or contradictory viewpoints are incorporated. Does not rely on the collection of new data. Simple for others to review.	Possible lack of information about a topic. May not contain narrative summary or recommendations.	Staff time for literature search, article review, and writing. Access to searchable database. Access to library resources. Expertise in interpreting statistics and research findings.
Literature Review (Narrative)	Review of existing research literature available on a topic area. Final product is generally a full narrative report, sometimes containing a summary or recommendation. Often conducted as a first step in more extensive research projects such as program evaluations.	What does existing research tell us about a population, program, or other area?	Inexpensive Provides extensive background material. Multiple or contradictory viewpoints are considered. Does not rely on the collection of new data.	Possible lack of information about a topic. Can be difficult to develop recommendations if existing evidence is contradictory or if little research has been done in an area. Final report may be cumbersome for a lay audience to review.	Staff time for literature search, article review, and writing. Access to searchable database. Access to library resources. Expertise in interpreting and synthesizing statistics and research findings.
Meta-Analysis	Statistical analysis of a large set of analysis results from existing studies. Like a narrative literature review, examines existing research, but more quantitative in nature.	What does existing research and data analysis tell us about a population, program, or other area?	More critically examines the means by which conclusions of a study were reached. Does not require new data collection. Examines and incorporates multiple study findings.	Existing analyses on a topic may be unavailable. May require more expertise than a narrative literature review. Relies on existing studies reporting consistent information necessary for coding. May lead to clearer recommendations than a narrative literature review.	Staff time for analysis, review, and writing. Statistical expertise. Access to searchable database. Access to library resources. Expertise in interpreting and synthesizing statistics and research findings. Purchase of existing databases.

Type of Project	Description	Questions Addressed	Advantages	Limitations	Resources or Expertise Required
Analysis Of Extant Data	<p>Researcher analyzes data available from an existing (usually public use) data set. This type of project might include for example, an analysis of Census data.</p> <p>A more complex analysis might involve the linking of multiple existing data sets.</p>	Can answer questions about a particular topic area based on an analysis of existing data.	<p>Does not rely on the collection of new data.</p> <p>Less expensive than collection of new data.</p> <p>Allows flexibility in determining an analysis to perform.</p>	<p>Findings are limited by information available in existing dataset(s).</p> <p>Can be very difficult to link existing datasets because of lack of common identifiers.</p> <p>If data are not publicly available, can be costly or difficult to access.</p>	<p>Staff time for data analysis and writing.</p> <p>Statistical analysis software package.</p> <p>Technical expertise in manipulating datasets.</p> <p>Statistical expertise.</p> <p>Access to datasets.</p>
Policy Study	<p>Examination of proposed or existing policy or procedure, effects of legislation or proposed legislation or effects of rules or standards.</p> <p>May incorporate qualitative and/or quantitative analysis.</p> <p>Could incorporate stakeholder interviews, analysis of new or existing data, statement of financial impact, etc.</p> <p>Nearly always done in conjunction with one of the other study types.</p>	<p>What will be the impact of a proposed policy or procedure?</p> <p>What has the impact been of an existing policy or procedure?</p>	<p>May not require data collection.</p> <p>Answers questions about specific policies</p>	<p>If necessary, may require data collection.</p> <p>May not anticipate all eventual impacts of a policy or procedure.</p> <p>Analyses of proposed policies often must be conducted under strict time constraints.</p>	<p>Staff time for analysis – dependent on type of analysis.</p> <p>Expertise in type of analysis required.</p> <p>Expertise in presenting recommendations to legislative audience, for example.</p>

Type of Project	Description	Questions Addressed	Advantages	Limitations	Resources or Expertise Required
Qualitative Study	May include a variety of studies, such as case studies, focus groups, in-person interviews, or the collection of other types of qualitative data. Can be conducted to examine service models or track caseflow.	What are the perspectives of stakeholders on a particular topic? What happens to a small sample of cases that use a service?	Data and findings may be richer than report on quantitative data analysis. Findings can be compelling, particularly to a lay audience. Good for conducting research of court users or hard-to-track populations.	Harder to interpret findings. Generally, findings are not statistically significant and therefore, cannot be generalized.	Expertise in the study technique utilized. Staff time in conducting (for example) program visits, interviews, and writing. Familiarity with program design, functions, and goals.
Program Process (Formative) Evaluation	Qualitative study of program operations. Often incorporates multiple qualitative study techniques and may include the collection of data on service utilization.	How is a program being implemented? How does a particular program operate? How many clients does a program serve? What services do they receive? Identifies program operation barriers and successes.	Can provide excellent information on program operations. Provides helpful information for program replication.	May provide preliminary indicators, but does not allow the researcher to address questions about program impact or cost-effectiveness.	Staff time for program visits, meetings, interviews, and writing. Familiarity with program design, functions, and goals. Skill in conducting interviews.
Data System or Technology Project	Technical assistance or consultation to an agency or court (for example) in setting up a computerized or electronic data collection system for a program, court division, or other service.	What core data should be collected about a program, court, or service in order to determine necessary information about a population using that service?	Provides technical assistance that contributes to program operations. Can contribute to the availability of data for research purposes.	Research findings may not result. Difficulties in implementation. Typically extremely expensive to implement a data system. Usually involves a large number of stakeholders. Requires a great deal of technical knowledge and stakeholder support.	Understanding of data system operations. Understanding of what questions specific variables will allow you to address. Data analysis expertise.

Type of Project	Description	Questions Addressed	Advantages	Limitations	Resources or Expertise Required
Evaluative Toolkit	Development of off-the-shelf means for programs to evaluate themselves.	<p>What is the impact of a program on a population or a system?</p> <p>Is a program cost-effective?</p> <p>How many clients does a program serve? What services do they receive?</p> <p>What are program barriers and successes?</p>	<p>Provides individual programs with the ability to evaluate themselves.</p> <p>Encourages the use of uniform definitions of operations and outcomes. This allows analysis across programs.</p> <p>Does not require staff time for evaluation work.</p>	<p>Could require technical assistance for programs to use properly.</p> <p>Probably requires some pre-testing by research staff to ensure applicability.</p> <p>Standard outcome measures may be too broad or too narrow for specific programs.</p>	<p>Expertise in research methods.</p> <p>Staff time for background work to create research design, possibly pilot-test data collection procedures, etc.</p> <p>Familiarity with program design, functions, and goals.</p> <p>Training and consultation for programs using.</p>
Management Survey	Survey or data collection of program management regarding the delivery of a service. Collects descriptive information.	<p>What are the key features of a program?</p> <p>What types of services does a program offer?</p> <p>Approximately how many clients does a program serve?</p>	<p>Can provide standardized information about programs.</p> <p>Can be less labor-intensive for researchers than evaluative or qualitative study of the program.</p> <p>Limited fieldwork required.</p> <p>Typically inexpensive.</p>	<p>Does not provide information from the perspective of program participants.</p> <p>Information collected may not be as rich as information collected during a qualitative study.</p> <p>Data collected generally cannot be used, on their own, for evaluative purposes.</p> <p>Can be difficult to standardize definitions of terms so they are broadly applicable.</p> <p>Often conduct management surveys – can use up good will of program staff.</p> <p>Relies on estimates from program managers.</p> <p>Does not provide information about how the services fit together or caseload works.</p>	<p>Data collection and analysis expertise.</p> <p>Time for background work, such as designing and field-testing survey instruments.</p> <p>Familiarity with program design, functions, and goals.</p>

Type of Project	Description	Questions Addressed	Advantages	Limitations	Resources or Expertise Required
Survey or Data Collection on a Population	<p>Survey or data collection on a population and/or a population using a particular service. Collects descriptive information.</p> <p>Usually administered to a sample of the population, but can be administered to a full population (census).</p>	<p>What are the characteristics of a population?</p> <p>What is a population's assessment of a service they receive?</p> <p>What types of services does a population receive?</p> <p>What are the service needs of a population?</p>	<p>Can provide extensive information about a population, and if that group is surveyed, provides valuable information from their perspective.</p> <p>Can address questions about need for services.</p> <p>Collects information about whether programs meet needs of population served.</p>	<p>Can be very resource-intensive, particularly if follow-up interviews are incorporated.</p> <p>Generally requires collecting at least some new data.</p> <p>Potentially long timeframe for data collection and analysis.</p> <p>Conducting a census requires substantial time and financial resources.</p> <p>Results from a census may also contain a substantial amount of missing data.</p> <p>Effort spent designing survey instrument.</p>	<p>Data collection and analysis expertise.</p> <p>Financial resources to support fieldwork.</p> <p>Time for background work, such as designing and field-testing survey instruments.</p>
Program Impact (Summative) Evaluation	<p>Quantitative analysis of data collected on the impact of a program on a system or population.</p> <p>Typically combines multiple types of studies.</p>	<p>What is the impact of a program on a population or a system?</p> <p>Is a program cost-effective?</p>	<p>Allows the researcher to assess the impact of a particular program.</p> <p>Can address questions about cost-effectiveness.</p> <p>Provide good information for someone designing a program.</p>	<p>Can be very costly, particularly if follow-up interviews are incorporated.</p> <p>Can be difficult to design.</p> <p>Generally would require the collection of at least some new data.</p> <p>Difficulties collecting necessary data.</p>	<p>Expertise in research methods, data collection, and analysis.</p> <p>Staff time for data collection, analysis, and writing.</p> <p>Staff time for background work such as creating research design, pilot-testing data collection, etc.</p> <p>Familiarity with program design, functions, and goals.</p>